made of an inorganic insulation material including silicon oxide or silicon nitride. An amorphous silicon layer is used as the active layer **250**, and a silicide or amorphous silicon layer heavily doped with N-type impurities is used as the ohmic contact layer **260**.

Referring to FIG. **8**C, a second conductive film is formed on the entire surface of the substrate **210** with the active region of the TFT formed thereon, and a data line **270** including source and drain electrodes and a second sensing line **333** are then formed through an etching process using a third photoresist mask pattern (not shown).

Referring to FIG. **8**D, a protection film **280** is formed on the entire surface of the substrate **210** with the TFT and the data line **270** formed thereon, and a portion of the protection film **280** is removed through an etching process using a fourth photoresist mask pattern (not shown) to form a contact hole for bringing the drain electrode into contact with an underlying pixel electrode and to form contact holes for bringing first and second sensing lines **331** and **333** into contact with an underlying conductive pad, respectively.

Referring to FIG. **8**E, a third conductive film is formed on the protection film **280**, and then patterned using a fifth photoresist mask pattern (not shown) to form a pixel electrode **290** and a conductive electrode pad **320**. At this time, a transparent conductive film containing ITO or IZO is preferably used as the third conductive film, and conductive electrode pad **320** is formed on an intersection region of first and second sensing lines **331** and **333** in a state where it is spaced apart from the pixel electrode **290** by a predetermined interval.

FIGS. **9**A to **11**B are views illustrating methods of arranging pressure particles on the LCD panel with a built-in touch screen according to the present invention, respectively.

The method shown in FIGS. **9**A and **9**B will be explained as follows. First, pressure particles **600** are sprayed onto color filter substrate **100** of the LCD panel with a built-in touch screen through a spraying method such that they are dispersed at a predetermined dispersion density (FIG. **9**A). At this time, pressure particless **600** may be sprayed in a state where they are mixed with a solvent or using air or nitrogen. Then, the polarizing plates **510** and **520** are attached to the opposite outer surfaces of the LCD panel, respectively (FIG. **9**B).

The method shown in FIGS. **10**A and **10**B will be explained below. Pressure particless **600** are sprayed onto an adhesive layer of first polarizing plate **510** to be attached to an outer surface of the LCD such that they are dispersed at a predetermined dispersion density (FIG. **10**A). At this time, pressure particless **600** may be sprayed in a state where they are mixed with a solvent or using air or nitrogen. Then, the polarizing plates **510** and **520** are attached to the opposite outer surfaces of the LCD panel, respectively (FIG. **10**B).

The method shown in FIGS. **11**A and **11**B will be explained below. First, pressure particless **600** are dropped on a predetermined region of color filter substrate **100**, i.e. on an upper region of a conductive column spacer, using a dispenser (FIG. **11**A). Then, the polarizing plates **510** and **520** are attached to the opposite outer surfaces of the LCD panel, respectively (FIG. **11**B).

Furthermore, to provide light to the aforementioned LCD panel, a backlight including a plurality of optical sheets, a lamp unit, a reflection plate, a light guide plate and the like is positioned below the LCD panel such that an LCD can be implemented.

As described above, an LCD panel with a built-in touch screen according to the present invention, in which pressure particles are disposed, has the following advantage. That is, an application range of touch pressure is concentrated on a local region by means of pressure particles. Thus, even though a soft touch tool having a large contact area with the LCD panel is used on the screen, it achieves substantially same effect as when a hard touch tool having a small contact area is used. As a result, the touch sensitivity can be kept at a certain level regardless of touch circumstances.

The foregoing is merely an exemplary embodiment of an LCD panel with a built-in touch screen and an LCD having the same according to the present invention. Thus, the present invention is not limited thereto. Although the present invention has been described in detail in connection with the preferred embodiment, it will be readily understood by those skilled in the art that various modifications and changes can be made thereto within the technical spirit and scope of the present invention. It is also apparent that the modifications and changes fall within the scope of the present invention defined by the appended claims.

What is claimed is:

1. A liquid crystal display (LCD) panel with a built-in touch screen, comprising:
- a first substrate;
- a second substrate positioned opposite to the first substrate;
- a liquid crystal layer between the first and second substrates;
- a sensing unit positioned between said substrates including a conductive column spacer and a conductive pad spaced apart from the conductive column spacer by a predetermined interval to sense a touch point; and
- a plurality of pressure particles having a predetermined hardness positioned on an outer surface of the first substrate,
- wherein the plurality of pressure particles concentrate outer pressure on the first substrate to actuate the sensing unit with less deformation of the first substrate.

2. The LCD panel as claimed in claim **1**, further comprising first and second polarizing plates attached respectively to outer surfaces of the first and second substrates.

3. The LCD panel as claimed in claim **1**,
- wherein the conductive column spacer is formed on the first substrate.

4. The LCD panel as claimed in claim **3**, wherein the conductive column spacer is formed on the black matrix.

5. The LCD panel as claimed in claim **3**, wherein the conductive column spacer comprises a projection including an insulative material and a conductive layer formed on the projection.

6. The LCD panel as claimed in claim **1**, wherein the plurality of pressure particles are formed on an area of the first substrate to correspond to the conductive column spacer.

7. The LCD panel as claimed in claim **1**, wherein the second substrate comprises:
- a transparent insulative substrate;
- a plurality of thin film transistors formed on the substrate; and
- a plurality of pixel electrodes,
- wherein the conductive pad is formed on the second substrate.

8. The LCD panel as claimed in claim **7**, wherein the second substrate further comprises a first sensing line and a second sensing line electrically connected to the conductive pad.

9. The LCD panel as claimed in claim **7**, wherein the conductive pad is made of the same material as the pixel electrode.

10. The LCD panel as claimed in claim **1**, further comprising a spacer for maintaining a liquid crystal cell gap between the first and second substrates.